

## AMENDMENTS TO THE CLAIMS

1. (Original) In an information handling system, a method for selectively discharging a dual battery system operable to provide electrical energy to an information handling system device, the method comprising:  
discharging a secondary smart battery included in the dual battery system, wherein the secondary smart battery having a sufficient amount of the electrical energy is housed in a removable media of the device; and  
discharging a primary smart battery included in the dual battery system in response to the discharging of the secondary smart battery to a threshold level, wherein the primary smart battery has a sufficient amount of the electrical energy.
2. (Original) The method of claim 1, wherein the primary smart battery continues to provide the electrical energy upon removal of the secondary smart battery.
3. (Currently Amended) The method of claim 1, wherein the primary smart battery is different than the secondary smart battery, ~~wherein the primary smart battery has~~ having a higher voltage rating compared to the secondary smart battery.
4. (Original) The method of claim 1, wherein the discharging of the secondary smart battery is in response to a loss of AC power source providing the electrical energy to the device.

5. (Original) The method of claim 1, wherein the discharging of the secondary smart battery is selected to occur prior to the discharging of the primary smart battery.
6. (Original) The method of claim 1, wherein the threshold level is defined to be approximately equal to 3% of relative state of charge (RSOC).
7. (Original) The method of claim 1, wherein the sufficient amount is greater than 3% of relative state of charge (RSOC).
8. (Original) The method of claim 1, wherein the sufficient amount is approximately equal to 80% of relative state of charge (RSOC).
9. (Original) The method of claim 1, wherein the discharging of the primary and secondary smart batteries is selectively controlled by a controller, wherein the controller controls the discharging by controlling an operation of a discharge\_primary switch and a discharge\_secondary switch.
10. (Original) The method of claim 9, wherein the controller switches the discharging from the secondary smart battery to the primary smart battery in response to a removal of the secondary smart battery.
11. (Original) The method of claim 9, wherein the controller switches the discharging from the secondary smart battery to the primary smart battery in response to a disablement in the discharging of the secondary smart battery.
12. (Currently Amended) A power supply system for providing power to an information handling system device, the power supply system being connectable to an AC adapter for deriving power from an AC power source,

the power supply system comprising:

a dual battery system including a primary smart battery and a secondary smart battery, wherein the secondary smart battery is selectable to be discharged prior to the primary smart battery in response to a loss of the AC power source, ~~wherein the secondary smart battery is~~ being housed in a removable media of the device;

a primary discharge switch operable to receive power from the primary smart battery, ~~the primary discharge switch~~ and being operable to control discharging of the primary smart battery;

a secondary discharge switch operable to receive power from the secondary smart battery, ~~the secondary discharge switch~~ and being operable to control discharging of the secondary smart battery;

a primary discharge enable switch operable to control the primary discharge switch from receiving the power from the primary smart battery, the primary discharge enable switch being responsive to an operating condition of the secondary smart battery;

an AC power source switch operable to select the AC power source to provide the power to the device in response to an availability of the AC power source; and

a battery charger operable to receive power from the AC adapter and provide the power to a selected one in the dual battery system.

13. (Original) The power supply system of claim 12, wherein the primary smart battery continues to provide the power upon removal of the secondary smart battery.
14. (Original) The power supply system of claim 12, wherein a controller included in the devices controls the primary discharge switch, the secondary discharge

switch and the primary discharge enable switch in response to the loss of the AC power source.

15. (Original) The power supply system of claim 14, wherein the controller closes the secondary discharge switch, opens the primary discharge switch and opens the primary discharge enable switch in response to the loss of the AC power source.
16. (Original) The power supply system of claim 14, wherein the controller opens the secondary discharge switch, closes the primary discharge switch and closes the primary discharge enable switch in response to a removal of the secondary smart battery or a depletion of power provided by the secondary smart battery to a predefined power level or a voltage of the secondary smart battery dropping below a predefined voltage level.
17. (Currently Amended) An information handling system comprising:
  - a processor;
  - a system bus;
  - a memory coupled to the processor through the system bus;
  - a removable media coupled to the processor and memory through the bus, the removable media operable to process input and outputs;
  - a power supply system operable to provide power to the processor, the bus, the removable media and the memory, the power supply system being connectable to an AC adapter for deriving power from an AC power source;
  - a controller coupled to the processor and memory through the system bus, the controller operable to control the power supply system; and
  - wherein the power supply system includes:
    - a dual battery system including a primary smart battery and a secondary smart battery, wherein the secondary smart battery is

selectable to be discharged prior to the primary smart battery in response to a loss of the AC power source, ~~wherein the secondary smart battery is~~ being housed in the removable media;

a primary discharge switch operable to receive power from the primary smart battery, ~~the primary discharge switch and~~ being operable to control discharging of the primary smart battery;

a secondary discharge switch operable to receive power from the secondary smart battery, ~~the secondary discharge switch and~~ being operable to control discharging of the secondary smart battery;

a primary discharge enable switch operable to control the primary discharge switch from receiving the power from the primary smart battery, the primary discharge enable switch being responsive to an operating condition of the secondary smart battery; and

a battery charger operable to receive power from the AC adapter and provide the power to a selected one in the dual battery system.

18. (Original) The system of claim 17, wherein the primary smart battery continues to provide the power upon removal of the secondary smart battery.
19. (Original) The system of claim 17, wherein the controller controls the primary discharge switch, the secondary discharge switch and the primary discharge enable switch in response to the loss of the AC power source.
20. (Original) The system of claim 17, wherein the controller opens the secondary discharge switch, closes the primary discharge switch and closes the primary discharge enable switch in response to a removal of the secondary smart battery or a depletion of power provided by the secondary

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smart battery to a predefined power level or a voltage of the secondary smart battery dropping below a predefined voltage level.